

AMENDMENT

In the Specification:

Please amend the paragraph beginning at page 6, line 6 as follows:

The SSP perforators can have straight or tapered shafts or can be pyramids or wedges or blades, as illustrated in Figures 2A-2G. In a preferred embodiment, the outer diameter of an SSP perforator is greatest at the base or second end, about 1-1000 μm , and the perforator outer diameter near the first end is preferably 10-100 μm . The length of an SSP perforator is typically in a range of 1-2000 μm , more preferably in a range of 100 - 1000 μm . The skin is not a smooth and rugged surface and has different depths microscopically. In addition, the thickness of the stratum corneum and elasticity of the skin varies from person to person and from location to location on any given person's body. A desirable penetration depth has a range, rather than a single value, for effective drug delivery and relatively painless and bloodless penetration. Penetration depth of an SSP perforator can affect pain as well as delivery efficiency. In transdermal applications, the "penetrated depth" of the SSP perforator is preferably less than 100 ~~mm~~ μm so that a perforator, inserted into the skin through the stratum corneum, does not penetrate past the epidermis. This is an optimal approach to avoid contacting nerves and blood vessels. In such applications, the actual length of the SSP perforator can be longer because the basal layer associated with the SSP system may not be fully inserted into the skin because of elasticity and rough surface of the skin.

Please amend the paragraph beginning at page 11, line 5 as follows:

Figure 6 is a sectional side view illustrating a perforation activation mechanism 60 in which one or more SSP perforators 61 is urged into the patient's skin 62 by a vacuum device 65, then injected by a spring 64 that causes the perforators 62 ~~61~~ to be extended from, or withdrawn into, an activation housing 66. Application of a mild vacuum in the skin perforation region may help to reduce skin variability.